DOCUMENT RESUME

ED 413 909 IR 056 739

AUTHOR	Tsardoulias, L. Sevim
TITLE	Survey of the Computer Users of the Upper Arlington Public Library.
PUB DATE	1997-05-00
NOTE	34p.; Master's Research Paper, Kent State University.
PUB TYPE	Dissertations/Theses (040) -- Reports - Research (143) -- Tests/Questionnaires (160)
EDRS PRICE	MF01/PC02 Plus Postage.
DESCRIPTORS	Computer Software; Information Technology; Internet; *Library Equipment; Library Surveys; *Microcomputers; *Public Libraries; Questionnaires; Satisfaction; *Users (Information)
IDENTIFIERS	Access to Computers; Access to Technology; *Computer Users; *Ohio

ABSTRACT

The Computer Services Department of the Upper Arlington Public Library in Franklin County, Ohio, provides microcomputers for public use, including IBM compatible and Macintosh computers, a laser printer, and dot-matrix printers. Circulation statistics provide data regarding the frequency and amount of computer use, but these statistics indicate little about the users. This study sought to learn some characteristics of the users, which programs they prefer, and their purposes in using public access personal computers. In a 24-day period in 1996, questionnaires were made available to every person 18 years old or older who used the personal computers at the main branch of the Upper Arlington Public library. The survey resulted in a 16% response rate with a total of 57 completed questionnaires. The most frequently cited reasons for use, from highest to lowest, were job searching, business correspondence, school assignments, and personal correspondence. Word processing programs were used in 73% of the visits. The typical respondent uses the library's computers two to three times per month. Computer users were as likely to live within Upper Arlington as to live outside. Seventy-four percent have access to computers elsewhere, and of those, 48% have computers at home. The satisfaction levels with both staff and equipment were high; however, a frequent comment was a desire for newer hardware and software, and for Internet access. The survey cover letter and questionnaire are appended. (Contains 26 references.) (Author)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 413 909

IR

SURVEY OF THE COMPUTER USERS OF THE UPPER ARLINGTON PUBLIC LIBRARY

A Master's Research Paper submitted to the
Kent State University School of Library and Information Science
in partial fulfillment of the requirements
for the degree Master of Library Science

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

by

L. Sevim Tsardoulias

May, 1997

PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

R. Du Mont

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

BEST COPY AVAILABLE

IR056739

Master's Research Paper by

L. Sevim Tsardoulias

B.A., Ohio State University, 1989

M.L.S., Kent State University, 1997

Approved by

Advisor _____ Date 4/18/97

SURVEY OF THE COMPUTER USERS OF THE UPPER ARLINGTON PUBLIC LIBRARY

The Computer Services Department of the Upper Arlington Public Library in Franklin County, Ohio, provides microcomputers for public use. IBM compatible and Mactintosh computers, a laser printer, and dot-matrix printers are available to library patrons. Circulation statistics provide data regarding the frequency and amount of computer use, but these statistics indicate little about the users. This study sought to learn some characteristics of the users, which programs they prefer, and their purposes in using public access personal computers. In a twenty-four-day period in 1996, questionnaires were made available to every person eighteen years old or older who used the personal computers at the main branch of the Upper Arlington Public Library. The survey resulted in a 16% response rate with a total of 57 completed questionnaires. The most frequently cited reasons for use, from highest to lowest, were job searching, business correspondence, school assignments, and personal correspondence. Word processing programs were used in 73% of the visits. The typical respondent uses the library's computers two to three times per month. Computer users were as likely to live within Upper Arlington as to live outside. Seventy-four percent have access to computers elsewhere, and of those, forty-eight percent have computers at home. The satisfaction levels with both staff and equipment were high; however, a frequent comment was a desire for newer hardware and software, and for Internet access. Results of the survey were given to Mr. John Brooks-Barr, director of the library.

TABLE OF CONTENTS

Introduction	1
Literature Review	5
Methodology	9
Analysis of Data	11
Summary and Conclusion	20
Selected Bibliography	22
Appendix A: Cover Letter	24
Appendix B: Computer User Questionnaire	25
Appendix C: Upper Arlington Public Library System Computer Services Department Responsibility Statement	27

LIST OF TABLES

Table 1: Why did you use the computers today? 12

Table 2: Which computer(s) did you use today? 12

Table 3A: Compaq users' responses: What computer program(s) did you use today? 13

Table 3B: Macintosh users' responses: What computer program(s) did you use today? 13

Table 3C: Combined responses from Compaq and Macintosh users: type of program 14

Table 4: How often do you use the computers at Upper Arlington Public Library? 14

Table 5: Do you have access to a computer outside the library? 15

Table 6: If yes, where do you have access to a computer outside the library? 16

Table 7: Do you live in Upper Arlington? 16

Table 8: What is your age range? 17

Table 9: How would you describe your occupation? 17

Table 10: What is your level of satisfaction with the equipment and programs provided? 18

Table 11: What is your level of satisfaction with the staff of this department? 18

Dedicated to the people who gave me names:

my parents and my partner

INTRODUCTION

The purpose of this study was to assess the purposes, habits, and needs of the users of public access microcomputers at the Upper Arlington Public Library in Franklin County, Ohio, by means of a self-administered questionnaire. This study sought to partially fill the lack of computer user surveys, by assessing who uses library-provided personal computers, and why, in one Franklin County urban library system.

BACKGROUND

1990 census data report that the city of Upper Arlington has a population of 34,128 in an area of 9.16 square miles, in which 95 percent of adults over twenty-five have a high school degree, the median household income is $53,140, and minority racial groups combined make up approximately 4 percent of the population. Though the residents of Upper Arlington tend to be well-educated, wealthy, and ethnically homogeneous, users of the public access computers and of the library as a whole span every demographic category. UAPL has at least 78,000 registered borrowers, consisting of city residents, residents of the Greater Columbus area, and students of the nearby colleges and universities (Upper Arlington (City), Ohio. 1992, 1-2).

The Upper Arlington Public Library is one of three public library systems in Franklin County that provides an extensive array of personal computers for public use. The involvement of UAPL in public access computing began in the early 1980s. In affiliation with a Community Involvement Program, UAPL applied to the National Science Foundation to be designated a ComputerTown. Originally a computer literacy program housed by the library and run by volunteers, the program was turned over to UAPL in approximately 1985. The Audiovisual Department maintained the computer services, but no longer provided a formal

computer literacy training program. In 1987, a separate Computer Services Department was created, which shares a room with the Audiovisual Department. The manager of the Computer Services Department, Steve D'Andrea, said that the goals of the department remain consistent with the original goals of the ComputerTown project: to aid in self-learning by providing space, equipment, and software to the public; and to make computer technology available to all, particularly to individuals without the resources to gain access to computers in other ways (D'Andrea 1995).

The Computer Services Department provides public access to three IBM compatibles (two Gateway Pentium processor-based multi-media systems with CD-ROM drives and one Compaq 486) and three Macintosh IIsi computers. Each of these is connected to both laser and dot-matrix printers. In addition, there is an electric typewriter, a CompuAdd 386 (IBM compatible) on which patrons may use their own software, and an Apple IIe in the Youth Services Department devoted to educational games. These last two computers are connected to dot-matrix printers. Each of the two branch libraries has an IBM compatible computer. One branch has a ink jet printer and the other has a dot-matrix printer. There is no cost for use or printing, but there is a limit of printing ten sheets per person per day on the laser printer. An additional ten sheets may be printed on the dot-matrix printer. Each computer user must have an Upper Arlington Public Library card. There are no age restrictions, nor is a child required to get a parent's signed permission, but users of all ages must understand and abide by the policies in a required agreement form. Once the Computer Services Department Responsibility Statement has been signed, a sticker is placed on the user's card to signify that he / she is a registered computer user.

Each computer has a corresponding barcode for circulation purposes. Because the computers are checked out to patrons while in use, circulation

statistics can be kept for each machine and hours of use calculated. However, these data do not reveal characteristics of the patron using the computers, what programs are being used, or for what purpose. In order to plan collection development effectively, a library must first ascertain the needs of its users. A survey of the Computer Services Department's patrons will assist in determining the requirements of the users, and may aid in future selection of equipment and software.

LIMITATIONS OF THE STUDY

Questionnaires have some intrinsic limitations. Respondents may misinterpret a question, and the researcher may misinterpret a response. A respondent may not remember information necessary to answer a question, may provide inaccurate answers, or not answer at all. The researcher or his / her assistants may err in the method of collecting and analyzing the data. Threats to validity may be minimized by pre-testing the survey instrument, by instructing assistants well, and by soliciting the opinions of experienced researchers on proposed methodology.

This survey is a snapshot of activity at the main branch of one library during a twenty-four-day period. Like most descriptive surveys of short duration and with a small population, it may provide insights to this library about its computer users, but it may have little generalizability. It could, however, serve as a model and stimulus for future research.

DEFINITION OF TERMS AND NOTATIONS

For the purposes of this paper, a public library is defined as a library and all its branches that use one budget and are administered by one director.

The phrase public access computers refers to personal computers made available to public library patrons by a public library for the patrons' own purposes. On-line public access catalog terminals and computers used by library

employees for library work are excluded from this definition. The terms computer, public access computer, micro, microcomputer, and personal computer are used synonymously in literature, and will be used interchangeably in this paper depending on the usage of authors cited.

Square brackets [ ] indicate an addition by the researcher to provide greater clarity within quoted material. Parenthesis seen within quotes were placed there by the quoted author.

LITERATURE REVIEW

The search for literature on the subject has been confined to a nineteen-year period, from 1977, the first documentation of public access microcomputers in libraries (Dewey 1990b, 4), to 1996. Major indices including ERIC, Library Literature, and LISA were searched on-line or on CD-ROM. Telephone inquiries were made in January 1996 to ascertain the presence and nature of public access microcomputer services in the seven Franklin County public library systems.

The presence of computers in public libraries has increased dramatically in the past two decades. In 1977, the first public access microcomputers, located in White Plains (N.Y.) Public Library, were documented in library literature (Dewey 1990b, 6). The 1984 Bowker National Library Microcomputer Usage Study found that approximately 11.3 percent of all public libraries made computers available to the public (R.R.Bowker 1985, 427, 429). By 1989, it was estimated that between one-third and one-half of all public libraries did (Dewey 1990b, 4). In 1991, a survey of public libraries in Ohio, Indiana, Illinois, and Minnesota found that 50.8% had public-access microcomputers (Jones 1991, 27). From 1991 to 1994, the percent of Ohio public libraries providing public access computers jumped from 67.9% (Jones 1991, 27) to 73.6%, or 184 of 250 (State Library of Ohio 1994, 6). On a local level, in Franklin County, three library systems of seven provide an extensive public access computing service. Columbus Metropolitan Library has provided this service since 1980, Bexley Public Library since at least 1990, and Upper Arlington Public Library since 1985. Though usage statistics are kept for each service, no user surveys have been done to date in the Franklin County public libraries.

Clearly, more public libraries nationally and locally are providing public access computers in response to high demand. However, there is little

information about the behavior of users of public access computers in public libraries. The majority of studies investigate the availability, facilities, and policies of public access computing. Investigation of user behavior, if included, is often secondary. A search on the topic of microcomputers in public libraries revealed three main types of literature: 1) "how to" literature, advising certain procedures and considerations in setting up and maintaining a public access laboratory; 2) case studies of such laboratories; 3) and the applications of computers to library tasks by library staff. The results of the researcher's 1995-96 literature search were similar to those of Carpenter in 1984. "The focus of much of this literature is directed toward staff use of micros for library operations....In the few books about all applications of micros in libraries, public access was briefly treated as one of the applications. Only one journal article revealed a research study related to public use of micros in libraries. Several journal articles described the projects of specific libraries" (Carpenter 1984, 185). Phenix found that in 1991, researchers had "reported on fifteen years of personal computers and computer software programs in public libraries, but we don't know much beyond the raw numbers of micros nationwide and insights from sporadic case studies" (Phenix 1991, 31). The state of library literature on this subject has not changed substantially since the inception of public access computer services in libraries.

Of the research that addresses user behavior, the findings reveal some consistency in users' purposes, and variety in ages of users. In Dewey's estimation, "Perhaps the best study to date [1990] of public access use was undertaken by Dr. Steven Robertson at three sites in California (1986)" (Dewey 1990b, 2). Patrons in Robertson's study reported their reasons for using the computers to be entertainment (34 percent), general interest (25 percent), professional growth (13 percent), school use (5 percent) and business use (2 percent) (Robertson 1986, 60). Phenix found that the purposes to which users

put public access microcomputers, from highest to lowest frequency of use, were these: word processing, games (including educational software), resumes, spreadsheets, business, user's own software, dBase, homework, and letter writing (Phenix 1991, 31). Phenix emphasized the wide-spread use of computers for employment purposes. "...library staff commented on the resume-writing users of public access micros. Word processing adults are the main users of the library's microcomputers, and the purpose is to change jobs" (Phenix. 1991, 33). Willard's 1984-85 survey of public libraries in Australia asked about the uses to which public access computers were put. These were, in no particular order, word processing, personal record keeping, games, educational activities, and others. Willard noted the difficulty in distinguishing between games and educational applications, since components of both were often in the same software. Unlike Phenix, Willard found children to be the primary users: "The results revealed school children as the highest user category and games were often cited as being very popular" (Willard 1986, 44).

It is important to note that with the exception of Robertson, all studies found investigated users' purposes by surveying library staff, not users. Even Phenix, who stated, "My purpose was to assess the attitudes as well as the needs of a population of microcomputer hardware and software users" (Phenix 1991, 31), questioned library staff instead of library patrons.

The lack of computer user surveys is unexpected, since literature regarding public access computing consistently advocates ascertaining the needs, purposes, and habits of users. Rogers, for example, advises this: "Establish the purpose of the service [i.e., providing software for a public access computer center], the age of the users to be served, and determine the function(s), then consider the software programs that will accomplish that purpose" (Rogers 1992, 16). Jones notes that "When selecting computer software, librarians relied heavily

upon advice from patrons. Patron recommendation was the primary method of software selection..."(Jones 1991, 34). Dewey is explicit in citing both the need for soliciting information from patrons, and the methods of doing so. "One of the most important tools for learning about patrons' needs is a community survey" to be conducted perennially or at specified times of the year (Dewey 1990b, 29). Regarding public access computer services in particular: "In the ideal case, the library evaluates the software collection, the hardware, and the patrons' needs on a regular basis. This can be done by examination, discussion, and survey. A microcomputer operation...must be updated and changed to reflect the needs of the community" (Dewey 1990b, 14).

Clearly, more public libraries nationally and locally are providing public access computers in response to high demand. In order to best meet the demand, it is necessary to know the clientele who are using the service and what needs they have that the library may address. A common way of ascertaining this information is by a periodic survey of users. Though writers in the field of librarianship consistently advocate planning library service, and most library professionals accept the value of knowing one's clientele for planning, few surveys of public library computer users have been done anywhere, and none have been done by the three libraries in Franklin County that provide public access computers.

METHODOLOGY

The study employed survey methodology which is characterized by using a sample group to generalize to a larger population. Survey research is descriptive. The researcher does not manipulate an independent variable. Thus, survey results may point to a correlation of factors, but causal relationships cannot be tested.

The research was conducted by means of a self-administered questionnaire distributed in the Computer Services Department of the main branch of the Upper Arlington Public Library. The questionnaire was developed by the researcher and pre-tested by selected library patrons and staff. It was distributed to registered computer users who are eighteen years old and older during a twenty-four-day period between October 25 and November 19, 1996. Questionnaires and pencils were placed in seven cubicles housing IBM compatible and Mactintosh computers. A sign was placed in each cubicle instructing participants to return completed questionnaires to the Computer Services Department desk. The Apple IIe computer was eliminated from this study, because it known that the users are primarily children, and the only software provided are educational games. The questionnaires were accompanied by a letter describing the study, stating that participation in the study is voluntary, and that the results will be anonymous. Questionnaires were not marked or numbered in any way. The questionnaire included both open-ended and closed-ended questions. A box for returning them was placed on the Computer Services Department desk.

The staff of the Computer Services Department and the Audiovisual Department check out the computers to users as a standard procedure. This

BEST COPY AVAILABLE

generates circulation statistics. During the period of the research, staff members performed an additional task: they tallied the number of patrons aged eighteen or older who checked out a computer. The determination of age was made visually.

The survey instrument consisted of 12 questions. The first questions asked participants to identify their reason(s) for using the public access computers, and which applications they used. Following questions asked the participants for general demographic and behavioral information, and requested their level of satisfaction with the Computer Services Department. Final open-ended questions solicited suggestions and recommendations for the department. The questionnaire form is in appendix A.

ANALYSIS OF DATA

Data was analyzed manually by the researcher. Patron comments are given in quotation marks. The content of patrons' comments has been recorded exactly as it was written, but capitalization and punctuation have been modified for clarity. For most items on the questionnaire, patrons gave more than one response, resulting in percentages that exceed 100%.

During the twenty-four-day period in which the survey was conducted, a total of 486 people used the computers. 320 or 66% were adults. Of these adults, 57 or 16% returned questionnaires. However, during the first three days the response rate was 23%, 8 participants of 35 adults. It is probable that this rate is more representative. It can be inferred from responses to Question 4 that the majority of respondents used the computers more than once while the survey was conducted. These respondents filled out one questionnaire, not one questionnaire per use.

Results are presented in the order of items on the questionnaire. Tables of results follow.

Question 1: Why did you use the computers today?

Job searching and using the laser printer were the most frequent reasons cited, each with 21 or 37% of responses. Personal business correspondence was the next highest area marked, with 18 or 32% of responses. 14 or 25% came to do school assignments, and 9 or 16% to write personal correspondence. The purposes of home-based business, community publications, computer education, and entertainment each had 5 responses, or 9% of the total. Printing on the dot matrix printer was not marked at all.

Other responses cited were these:

"Want to give my 4 yr. old exposure to CD Roms."

"Forces me to block out time for specific classwork - wks against my procrastination. Has helped focus study hours that cont. afterwards in library proper."

"Church council minutes for two groups" ["community publications" was marked]

"Business spread sheet - Excel."

"Use of IBM type computer for business. I only have Macintosh at work."

"Updating Christmas card list (yrly job) Used it wkly when I had a religious obligation that needed constant use of a computer. Another religioius obligation requires it less often."

"Personal jobs, and notes of importance to myself."

Table 1

1. Why did you use the computers today?	Number (N=57)	Percent of total (N=57)
Job search	21	37%
School assignments	14	25%
Personal correspondence	9	16%
Personal business letters	18	32%
Personal finance	1	2%
Home-based business	5	9%
Community publications	5	9%
Computer education	5	9%
Entertainment	5	9%
Printing on the laser printer	21	37%
Printing on the dot matrix printer	0	0%
Other	6	11%

Question 2: Which computers did you use today?

37 respondents, or 65%, indicated that they had used the Compaqs (IBM compatibles). 22 respondents, or 39%, used the Macintoshes. One patron, 2% of all respondents, used the CompuAdd (IBM compatible). Three respondents indicated using both a Compaq and a Macintosh. Thus, the total number of users was 57, while the total number of uses was 60.

Table 2

2. Which computer(s) did you use today?	N=57	N=57
Compaq (IBM compatible, rooms 1-3)	37	65%
Macintosh (rooms 4-6)	22	39%
CompuAdd (IBM compatible, room 9)	1	2%

BEST COPY AVAILABLE

Question 3: What computer program(s) did you use today?

Word processing was by far the most popular application. 73% of the responses, 44 of 60, indicated that participants used word processing programs. On the Compaqs, WordPerfect and Word 6.0 combined garnered 30 of the 37 Compaq responses. This is 50% of total responses and 81% Compaq responses. Corel Draw, Mavis Beacon Teaches Typing, Lotus, and Excel each had one response. One Compaq user did not specify.

The majority of Macintosh users did word processing also. Word and Macwrite combined accounted for 14 of the 22 Macintosh responses. This is 23% of the total, and 63% of Macintosh responses. Microsoft Works was used by two patrons, and Excel by one. CD-Roms of Oregon Trail, Gus goes to Cybertown, and Western Art, were each used once.

The one CompuAdd user's response was not legible.

Table 3A: Compaq users' responses
3. What computer program(s) did you use today?

	N=37	N=37
Word 6.0	19	51%
WordPerfect	11	30%
Solitaire	2	5%
Lotus	1	3%
Mavis Beacon Teaches Typing	1	3%
Corel Draw	1	3%
None specified	3	8%

Table 3B: Macintosh users' responses
3. What computer program(s) did you use today?

	N=22	N=22
Word	11	50%
MacWrite	3	14%
Works	2	9%
Excel	1	5%
Oregon Trail (CD-Rom)	1	5%
Gus in Cybertown (CD-Rom)	1	5%
CD-Rom of Western Art	1	5%
none specified	1	5%

Table 3C: Combined responses from Compaq and Macintosh users: type of program
3 What computer program(s) did you use today?

N = number of times the computers were used	N=60	N=60
Word processing programs	44	73%
Integrated programs	2	3%
Spreadsheets	2	3%
CD-Roms	3	5%
Entertainment programs	2	3%
Educational programs	1	2%
Drawing programs	1	2%
None specified	4	7%

Question 4: How often do you use the computers at Upper Arlington Public Library?

Using the computers two to three times a month was the most common pattern of behavior. 20 respondents, 35%, indicated this. 15 or 26% use the computers weekly. Nine use the computers more than once a week, and eight use them once every two to three months. Four use them monthly, two use them once every four to six months, and one uses them once a year.

The person who marked "two to three times a month" wrote "this was our first visit. My response reflects anticipated future use." Another who marked two to three times a month frequency explained a change in his / her pattern of use: "formerly, up until recently, weekly." A person who indicated "more than once a week" wrote "6 times a month, perhaps." A person who marked "every two to three months" added "and then weekly for a period."

One person did not specify, explaining "first time user."

Table 4
4 How often do you use the computers at Upper Arlington Public Library?

N= number of users	N=57	N=57
more than once a week	9	16%
weekly	15	26%
two to three times a month	20	35%
monthly	4	7%
every 2-3 months	8	14%
every 4-6 months	2	4%
once a year or less	1	2%

Question 5: Do you have access to a computer outside the library?

42 or 74% of respondents have access to a computer outside the library. 15 or 26% do not.

Some comments were given by those who responded "yes":

"sometimes"
"not mine"
"but not CD Rom"
"at work, but I prefer to come to the library rather than staying after work."
"but not a Mac."
"but no printer"

Table 5

5. Do you have access to a computer outside the library?

N = number of users	N=57	N=57
yes	42	74%
no	15	26%

Question 6: If yes, where do you have access to a computer outside the library?

Of the 42 participants who answered affirmatively to question 5, the home and the workplace were the most common additional places where patrons have computer access. According to Lifestyle Market Analyst, 37.5% of households in the Columbus metropolitan area have personal computers (Lifestyle, p. 918). Twenty participants in this survey, 48%, have access to computers at home. Almost the same number indicated that they have access at work, 19 or 45% . Ten respondents or 24% have access at a school or university. One respondent uses computers at another library. A person who marked "home" wrote that the computer available was a laptop.

Of those who can use computers elsewhere, many indicated that the library offered programs or features not available on the other computers to which they had access.

The comments of five respondents who marked "other" are below

"friend"
"friend's home"
"I use a DEC Alpha station @ work + I have a dinosaur 286 @ home. I come to UAPL for all my word processing work."
"Senior Center"
"family members"

Table 6

6. If yes, where do you have access to a computer outside the library?		
N=number of users with other computer access	N=42	N=42
school, university	10	24%
workplace	19	45%
other library system	1	2%
home	20	48%
other	5	12%

Question 7: Do you live in Upper Arlington?

The numbers of Upper Arlington residents and non-residents who use the computers are evenly matched. 29 respondents live within Upper Arlington, 28 do not.

A person who marked "no" wrote "computer no longer available at library in Hilliard" to explain his / her travel to UAPL.

Table 7

7. Do you live in Upper Arlington	N=57	N=57
yes	28	49%
no	29	51%

Question 8: What is your age range?

30 or 53% are between the ages of 25-39. 19 or 33% are 40-64 years old. The categories of 18-24 years and 65 or older each had 4 members, or 7% of respondents.

Table 8

8 What is your age range?	N=57	N=57
18-24	4	7%
25-39	30	53%
40-64	19	33%
65 or older	4	7%

Question 9: How would you describe your occupation?

Several people indicated more than one occupation, such as working and retired to indicate semi-retired, or student and working.

37 or 65% are working. 11 or 19% are students. Six or 11% are retired, and three or 5% described themselves as homemakers. Seven or 12% consider themselves to be in the following, other categories:

"professional": two responses
"online editor"
"professional - self-employed"
"metallurgical engineer"
"visiting professor - OSU"

Table 9

9. How would you describe your occupation?	N=57	N=57
student	11	19%
homemaker	3	5%
working person	37	65%
retired person	6	11%
other	7	12%

Question 10: What is your level of satisfaction with the equipment and programs provided?

The level of satisfaction with the equipment and programs was high. 23 or 40% indicated that they were extremely satisfied, 31 or 54% were satisfied, and three or 5% were somewhat satisfied. A person who marked "satisfied" wrote "the occasional problems seem to be straightened out quickly."

Table 10

10. What is your level of satisfaction with the equipment and programs provided?

	N=57	N=57
extremely satisfied	23	40%
satisfied	31	54%
somewhat satisfied	3	6%
dissatisfied	0	0%
extremely dissatisfied	0	0%
no opinion	0	0%

Question 11: What is your level of satisfaction with the staff of this department?

Because the Computer Services Department and the Audiovisual Department staff share duties and workspace, it is not always possible for patrons to differentiate between Computer Services staff and Audiovisual staff. Thus, responses for this question may refer to the staff of one or both departments.

Of those who had favorable opinions, the satisfaction level with the staff was higher than the satisfaction level with the equipment and programs. 36 or 63% indicated that they were extremely satisfied with the staff. 20 or 35% were satisfied. Two persons, 4%, were extremely disappointed in the staff. One of these people wrote, "Not enough help!"

Table 11

11. What is you level of satisfaction with the staff of this department?

	N=57	N=57
extremely satisfied	36	63%
satisfied	20	35%
somewhat satisfied	0	0%
dissatisfied	0	0%
extremely dissatisfied	2	4%
no opinion	0	0%

Question 12: Please feel free...to write comments and suggestions about using the computers and the Computer Services Department.

"Great service to community. Very helpful staff."
"Access to the Internet"
"It would be nice to have more computers w/ current software."
"It is an excellent service - I also like the privacy of the individual rooms. Thank you."

"If an additional PC is purchased in the future, it would be great to set it up as a 'designated laser printer' workstation. That way, we could use special stationery in the laser printer + reserve it in blocks of 30 minutes. I feel silly reserving a PC for 1 1/2 hours when I only need it to print for @ 10-15 minutes."

"More time to use them."

"Although UAPL provides many programs on Macintosh, I think some programs do not have support by manuals and/or by support personnel. BASIC, PageMaker, & Hypercard 2.0V2 are examples. It may be suggested that some person knowledgeable on those program should be available for calling, if not present, to help the patrons who need help."

"Very nice service! I like to write letters on the computer to my family + friends + I've also used it for updating my resume."

"We had to switch computers once because of a malfunction. I suppose hardware could be better. Software selection also very limited for young children."

"1. Computers are generally ok for word processing, staff is generally courteous, laser copies nice idea [a smiling face was drawn beside this comment]. 2. Adult patrons should be given a (changed daily or weekly) password to get access to the C: drive - to copy / delete files from their own floppies and / or CD's + have general file management / copying easier. To copy a single WORD file to a backup floppy - I've got to copy it to a place on the C drive, get out of WORD, come back into WORD, find the file on the C: drive, copy it to my newly-inserted backup floppy... but still must leave personal files on C drive until (whenever the staff person gets around to deleting it...when?) - after I write down which file they must delete.... Correct this absurd "hobbling" of adult computer users...[an unhappy face with tongue sticking out was drawn beside these comments]."

"[Three staff members mentioned by name] are top notch for customer service."

"A scanner would be nice. Keeping up with the latest releases of major software would be nice. Internet access."

"New Power Macs, Please!"

"I believe this is great opportunity for those who cannot afford computers at any place."

"The computers should be updated with current models & programs - with scanners, etc."

"Would like to see an easier way to facilitate printing envelopes. The traction feed printers in the cubicles simply are not accurate enough (I have tried but have yet to successfully print an envelope on them."

"Until I came in today I was not aware that the library had computers for patrons to use. Very nice! Thank you."

SUMMARY AND CONCLUSIONS

As in Phenix' 1991 survey, the results of this questionnaire find that the most frequently used type of program is word processing, and the most frequently cited purpose is changing jobs. Users at Upper Arlington Public Library apply word processing programs in a variety of endeavors: after job searching, business correspondence and personal correspondence are listed most often, followed by schoolwork. When all types of computer applications are considered, the categories of home-based business, creating community publications, computer self-instruction, and entertainment, are each cited by nine percent of users. Thirty-seven percent of users get a hard copy of their results from the laser printer. IBM compatibles are used more often than Macintoshes.

The sample population excluded children. Of the adult respondents, about half were younger adults between the ages of twenty-five to thirty-nine. A third were older, but not yet senior citizens.

Overall satisfaction levels with both the staff and equipment were high, but participants cited a desire for newer hardware and software, and for Internet access. Some expressed frustration with a lack of support from manuals and personnel. One requested a change in limits placed on users for security reasons.

Two goals of the Upper Arlington Public Library Computer Services Department are making computer technology available to all, especially to individuals who lack other means of access; and to facilitate learning by providing the necessary space, equipment, and software. Providing tutoring or in-depth assistance is outside the scope of the Department's mission. Data from this computer user survey confirms that UAPL is achieving its goals. More than a quarter of adults who use the library's computers do not have the opportunity to

use computers elsewhere. Of the remaining users, nearly half have computers at home, yet choose to come to the library. Reasons cited were that the library provides equipment or features that patrons do not have on their home computers. More than half the respondents live outside of Upper Arlington. By providing public access computers, the Upper Arlington Public Library serves not only its own residents, but the community at large.

A suggestion for further research would be to conduct a study including all elements of the computer user population on a regular basis. Children constitute approximately thirty-four percent of UAPL's computer users. Learning what they use and why would be valuable in collection development. Since November 1996, when the survey concluded, the Macintosh IIsi computers have been replaced by PowerMacs and some IBM-compatible software has been updated. It would be interesting to compare the results of this survey with that of a future survey done after the upgrades.

The results of the study were given to Mr. John Brooks-Barr, director of the Upper Arlington Public Library.

The researcher wishes to thank the director and staff of the library for their cooperation and patience.

SELECTED BIBLIOGRAPHY

Alreck, Pamela L. and Robert B. Settle. The Survey Research Handbook. 2nd ed. The Irwin series in marketing. New York: Irwin Professional Publishing, 1995.

Anderson, Charles. "Using Technology." Wilson Library Bulletin 64 (September 1989). 90-91.

Bowker Annual of Library & Book Trade Information. 30th ed. New York: R.R. Bowker, 1985.

Carpenter, Jennifer K. "Microcomputers in Public Libraries for Public Access: A Survey." North Carolina Libraries 42 (Winter 1984). 185-190.

D'Andrea, Steve. Interview by researcher. Upper Arlington, Oh. September 15, 1995.

Davis, David M., Norma Lambson, and Stephen L. Whitney. "Public Access Microcomputer Services in Public Libraries." Wilson Library Bulletin 112 (November 1987). 55, 58, 60, 64.

Dewey, Patrick R. 101 Microcomputer Projects to do in Your Library: Putting Your Micro to Work. Chicago: American Library Association, 1990.

Dewey, Patrick R. "Portage-Cragin: Public Access Micros Come of Age at CPL." Computers in Libraries 11, no. 9 (October 1991). 54-55.

Dewey, Patrick R. "Public Access Microcomputers." Computers in Libraries 10. no. 88 (September 1990). 46-47.

Dewey, Patrick R. Public Access Microcomputers: A Handbook for Librarians. 2nd ed., Professional Librarian Series. Boston: G.K. Hall & Co., 1990.

Dewey, Patrick R. "Public Computing." Small Computers in Libraries. 8, no. 8 (September 1988). 33-34.

Dewey, Patrick R. "Software for Patron Use: Case Studies from Public Libraries." Library Trends 40 (Summer 1991). 139-147.

Falk, Howard. Personal Computers for Libraries. Medford, NJ: Learned Information, 1985.

Jones, Barbara. "Survey of Computers in Public Libraries in Ohio, Illinois, Indiana, and Minnesota." Master's thesis, Kent State University, 1991.

Lifestyle Market Analyst. Des Plaines, Illinois: SRDS, 1996.

McClaughlin, Cindy. "Library Use of Microcomputers in Ohio." Ohio Media Spectrum 39 (Summer 1986). 5-13.

McClaughlin, Cindy. "Listing of Computer Use in Ohio's Academic, Public, and Special Libraries." Ohio Media Spedtrum 39 (Summer 1986). 14-19.

Phenix, Katharine. "Microcomputers in Colorado Public Libraries: A Survey." Wilson Library Bulletin 66 (December 1991). 30-34.

Powell, Ronald R. Basic Research Methods for Librarians. 2nd ed. Norwood, NJ: Ablex, 1991.

Robertson, Steven D. Public Microcomputing: Facilities and Usage in Public Libraries. Studio City, Ca: Pacific Information, 1986.

Rogers, Jeanne. "Choosing Software for a Public Access Computer Center." Show-Me Libraries 43 (Winter 1992). 16-18.

Schlessinger, June H. and Rashelle S. Karp. "Microcomputers in Public Schools and School Libraries." Library Trends 40 (Summer 1991). 148-159.

State Library of Ohio. Public Libraries with Public Access to PCs in Ohio. Columbus, Oh. : State Library of Ohio, 1995.

Upper Arlington (City) Ohio. "Upper Arlington Profile" 11-1-92

Willard, Patricia. "Microcomputer Availability to Public Library Clients." LASIE 17 (September / October 1986). 39-46.

Wright, Douglas A. "Patron Use of Computers in Public Libraries" Bulletin OERI U.S. Department of Education Office of Educational Research and Improvement. Eric Document 272181. (March 1986) ; 1-18.

APPENDIX A COVER LETTER

SURVEY OF THE COMPUTER USERS OF THE UPPER ARLINGTON PUBLIC LIBRARY October 25, 1996

Dear library patron,

Periodically, libraries seek information from patrons about the services they offer. Input from users can help libraries tailor their services to meet current needs, and plan for the future.

I'm completing a Master of Library Science degree at Kent State University, where one of the graduation requirements is a research project. For this project, I am asking adults who use the personal computers at Upper Arlington Public Library to complete a questionnaire. The objective is to gain insight into how the computers are being used, and to learn what you think about the services offered.

Your response to the questionnaire will be anonymous and confidential, as the questionnaires are not marked or numbered in any way. There is no known risk of participating in this study. Regardless, your participation is entirely voluntary. There is no penalty if you choose not to participate, or if you withdraw from the study.

This study is not sponsored by Upper Arlington Public Library, however, it has been approved by the library director. It has been approved by Kent State University also. For further information about this study, please contact:

Ms. Sevim Tsardoulias, researcher (614) 267-8904
or Dr. Marcia Zeng, faculty advisor (330) 272-2782

If you have questions about Kent State University's rules for research, please contact:

Dr. M. Thomas Jones (330) 672-2851

Thank you for your cooperation.
Sevim Tsardoulias
Graduate Student

APPENDIX B COMPUTER USERS QUESTIONNAIRE

Please return this questionnaire to the box on the Computer Services Department desk.

1. Why did you use the computers today? (check all that apply)

_____Job search (example: resumes, cover letters)
_____School assignments
_____Personal correspondence (example: journal, writing to friends)
_____Personal business letters (example: writing to businesses, government agencies)
_____Personal finance (example: home budget)
_____Home-based business (example: business cards, advertisements)
_____Community publications (example: flyers, newsletters, of an organization or club)
_____Computer education (example: tutorials, to learn to use the computer and certain programs)
_____Entertainment (example: games such as solitaire, minefield)
_____Printing on the laser printer
_____Printing on the dot matrix printer
_____Other (please explain) _____
_____

2. Which computer(s) did you use today?

_____Compaq (IBM compatible, rooms 1-3)
_____Macintosh (rooms 4-6)
_____CompuAdd (IBM compatible, room 9)

3. What computer program(s) did you use today?

_____
_____

4. How often do you use the computers at Upper Arlington Public Library?

_____more than once a week
_____weekly
_____two to three times a month
_____monthly
_____every 2-3 months
_____every 4-6 months
_____once a year or less

5. Do you have access to a computer outside the library?

_____yes _____no

6. If yes, where do you have access to a computer outside the library?
_____school, university
_____workplace
_____other library system
_____home
_____other (please describe)_____

7. Do you live in Upper Arlington?
_____yes _____no

8. What is your age range?
_____18-24
_____ 25-39
_____40-64
_____65 or older

9. How would you describe your occupation?
_____student
_____homemaker
_____working person
_____retired person
_____other _____

10. What is your level of satisfaction with the equipment and programs provided?
_____extremely satisfied
_____satisfied
_____somewhat satisfied
_____dissatisfied
_____extremely dissatisfied
_____no opinion

11. What is your level of satisfaction with the staff of this department?
_____extremely satisfied
_____satisfied
_____somewhat satisfied
_____dissatisfied
_____extremely dissatisfied
_____no opinion

12. Please feel free to use the back of this paper to write comments and suggestions about using the computers and the Computer Services Department.

APPENDIX C

Upper Arlington Public Library System
Computer Services Department
Responsibility Statement

The Upper Arlington Public Library is pleased to make computers available to patrons. To insure that the service operates smoothly, your cooperation is needed with the following rules:

1. In order to use the library's personal computers, you must have the ability to do so. Staff members are not to provide training or in-depth assistance. Tutorials are available for some programs.

2. You may make an appointment to use a computer by telephone or in person up to one week in advance. If a cancellation occurs, the time becomes free for the next person who calls or arrives.

3. When you come to use the computers, you must have a current Upper Arlington Public Library card. If your card is blocked, you will not be able to use the computers.

4. Scheduling is done in one and a half (1 1/2) hours periods during the week and one (1) hour periods during the weekend. If no one has been scheduled for the period following your scheduled time, you may continue to use the computer until a new user arrives. Scheduled appointments will be held for fifteen (15) minutes for latecomers; then the time will be given to someone else.

5. The library provides commercial software to be used in the library only. Patrons who wish to save data files should bring their own data disks. The library is not liable or responsible for disks or data damaged in the process of using the library's equipment.

6. If your disk is infected with a virus, a Computer Services staff member may be able to eradicate the virus. This service is performed at the library's discretion. You will not be able to use an infected disk to save or retrieve data files.

7. A maximum of two (2) people may use a computer at one time.

8. **DOT MATRIX PRINTER:** 10 sheets of printer paper is available at the Computer Services desk for use with dot matrix printers. We limit paper to 10 sheets per day. Users may bring an additional 10 sheets of their own per day.

LASER PRINTER: There is a limit of 10 laser printed pages per day. You may not use your own paper, labels or envelopes in the laser printer. We strongly suggest that you use the PAGE PREVIEW feature (available in most programs) to examine your work before you print it. Do not use the dot matrix printer to preview your work because the output will look different on the laser printer.

9. Patrons will not be able to connect their own equipment, such as laptop computers, to library equipment.

10. If a computer is out of order during a paticular time period, the regular schedule will remain in effect and lost time will be rescheduled. We will attempt to notify you if a computer for which you are scheduled is out of order. Library staff have the right to cancel or interrupt use of the computer, but they will make every effort not to do so.

11. COPYING OF COMMERCIAL SOFTWARE IS PROHIBITED.

Abuse of the rules will result in loss of computer privileges. Staff members have the right to restrict computer use by those who cannot abide by the library policies.

I, _____, understand and agree to abide by these rules.
(Signature)

Date _____

_____ Card # _____
(Print your name here)